



## **Western New York Rural Broadband Healthcare Network (WNY RBHN)**

*Advancing the health workforce through innovation and technology*



Federal Communication Commission  
445 12<sup>th</sup> Street, S.W  
Washington, D.C. 20554

Re: Public Notice

**In The Matter of: DA 12-1166;  
Released: July 19, 2012; WC Docket No. 02-60 and DA 12-1166  
Wireline Competition Bureau (WCB) seeking further comment  
on issues in the rural health care reform proceeding.**

The Western New York Rural Area Health Education Center, Inc. (R-AHEC) was selected as one of the original Rural Health Care Pilot Program (RHCPP) participants with a total award of just over \$5.9 million. With these funds the R-AHEC created the Western New York Rural Broadband Healthcare Network (WNY RBHN), a combined consortium of fifty-three healthcare providers at forty-nine endpoints over a fully meshed, managed, secure, and reliable network through Multi-Protocol Label Switching (MPLS) with Quality of Service (QoS). This consortium of healthcare providers (HCPs) consists of hospitals both rural and urban, post-secondary educational institutions providing medical education, community health centers and federally qualified health centers currently throughout nineteen of New York States sixty-two counties and is hopeful to utilize the forthcoming program to add on additional facilities and expand geographically. Our comments below are based upon our four and half year's worth of expertise with the Pilot Program in addition to those years worth of experience and work with our current partners.

### **SECTION I. CONSORTIA:**

#### **A. CONSORTIUM APPLICATION PROCESS.**

R-AHEC agrees that "the consortium approach has many benefits especially for the rural HCPs" (Public Notice DA 12-1166, Page 3, July 19, 2012). From our experience working with the individual HCPs, many of them knew the Regular Program existed and had looked into applying, however, they were intimidated by the rules, regulations, and paperwork involved and consequently decided that the subsidy reimbursement involved was

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just not enough to warrant the investment of time and energy. One of the requirements of participants in the RHCPP was obtaining Letters of Authorization (LOAs) for all participating members. It is our position that this policy should continue as a requirement from participating members of the consortium. Filing LOAs at the 466A level would create an additional confusion. In WNY we utilized the LOAs as an element of the eligibility screening process, and had very few facilities that dropped out of the program after the facility LOA was received. Having the LOA on file prior to the submittal of the 465 attachment filing ensures a level of commitment prior to the RFP being issued and bids being received/reviewed. If those forms are not required until a later stage, and facilities are unable to provide, , several parties will have invested a significant amount of time and money in completing and processing the 465 attachment, bids, and reviews, that could have been invested in facilities that are willing and eligible to participate.

The commission should require consortium applicants to provide details in the consortiums request for services (Form 465) regarding the services to be purchased, sites to be served, and general type of service, as is currently required in the Pilot Program. It is in our position that the commission should require a description of the general type of service which is anticipated to be provided, but should not require specifics, such as the desired bandwidth at the Form 465 level. The commission should not require consortium applicants to provide the desired bandwidth. In our project, we had several facilities that had no idea what they were able to afford for bandwidth until the quotes were received and they discussed the options that were available with the project vendor. Furthermore, it is our position that sites to be served and descriptions of general type of service should be required for the Form 465. Without this information, the vendor would not know what to quote for services and sites as pricing varies significantly by service and location.

#### **B. POST-AWARD REPORTING REQUIREMENTS.**

The least burdensome way to collect the information necessary to evaluate compliance would be to utilize the information that is uploaded in the forms to create reports showing type of connections, speed, funds committed and the funds invoiced against project facilities.

The commission should require consortium applicants to submit Quarterly Reports as in the Pilot Program, as this is no different than any other grant funded project requiring quarterly reports.

The Commission should require the same information from all facilities and/or consortiums participating in the programs.. It would be very helpful and consistent if an online quarterly reporting system could be developed and utilized. With such a system, the commission could ensure that all projects were providing information in a consistent and timely manner. This system should be an interactive, web-based system, where all of the information is directly entered and reports and forms are automatically generated behind the scenes. The facility name, address, HCP numbers, bandwidth speeds, census tracts, RUCA codes could all automatically be populated using drop down boxes to show the status of that facility (ie. RFP in process, RFP posted, Bid Review, construction phase, live facility). By placing a save and continue button at the bottom of the page the report could easily be updated through the course of the quarter. The information from the Network Cost Worksheet and invoices could also be automatically populated for the consortia/individuals to review the amount of funds invoiced for and the amount of funds remaining to be correct for each specific HCP. Updated project contact/coordination, network narratives, sustainability plans, and HHS Health IT initiatives could simply be text boxes where the individual and consortia applicants update any current information for the

present quarter. Once all fields have been entered the last button would be a save, submit and print the reports could then easily be printed and uploaded onto the FCC ECFS reporting system. By filing Quarterly Reports online would ensure that all individuals and consortia are providing the commission with the same information with data that could easily be analyzed for review.

In the event an online quarterly reporting system cannot be created and utilized it would be helpful, if when filing the quarterly reports you only file the current quarterly information. Currently, in the Pilot Program quarterly reporting, we are required to keep reiterating and adding to the historical information each quarter, creating very lengthy reports.

### **C. SITE AND SERVICE SUBSTITUTION.**

The site and service substitutions allowed through the Pilot Program are very beneficial to the management of the project.. It allows project participants to utilize funding to the maximum capacity. It would be very helpful if the commission allowed this practice to remain in place. In the past when a facility has determined it can no longer participate there has been another waiting, asking to participate and take its place.

## **SECTION II. INCLUSION OF URBAN SITES IN CONSORTIA:**

### **A. PROPORTION OF URBAN OR RURAL SITES IN CONSORTIA.**

It is our position that an urban HCP wishing to participate in these programs should be required to be part of a consortia with rural partners. It is our belief that the Commission should not require that more than a de minimis number of rural HCPs should be included in any consortia. The majority of the participants in the programs are the rural facilities, and the urban facilities which are involved are working in conjunction with HCPs in the rural areas.

Throughout the current regular program no facilities that are deemed urban via census tract numbers are allowed to participate in the program. In the efforts of the RHCPP both rural and urban HCPs are allowed to participate. Here in WNY we feel that it is critical to provide connections from rural members to the urban facilities. The commission needs to provide support for broadband services to both rural and urban HCPs to encourage this connection.

### **B. LIMITING PERCENTAGE OF FUNDING AVAILABLE TO URBAN SITES.**

An estimate from USAC says “35 percent of committed funds have gone to urban HCPs in the Pilot Program (while noting that this figure probably overstates the true urban share).” (Public Notice DA 12-1166, pg 7 b. limiting percentage of funding available to urban sites). Considering the number of pilot projects and the amount of funding that was available, 35% seems to be a very small portion of the funds that were distributed. Here in WNY we included urban facilities in our network design, we feel that it is critical to help bridge the gap between rural and urban HCPs and the healthcare being provided.

Adopting a program in which urban sites receive no greater than 35% of total funds would create a significant amount of administrative issues for the projects and add to the confusion regarding participation and potentially inhibit the urban and rural participants from participating. Issues to consider would be: How would this be tracked and what impact would this restriction have on participation rates? What would the impact be if an urban facility tried to join a consortium before a few rural participants joined? Would the urban participants be rejected upfront until a rural participant joined? The complications of such a restriction would be numerous and potentially very difficult to manage. The subsidy rates available should be the same for both rural or urban facilities to allow easier explanation, implementation and utilization of the program. Through the utilization of the Pilot Program our participants were eligible for a subsidy of 85%. Our project was fortunate enough that once pricing was received from vendors the rural participants utilized a subsidy of 80% and the urban participants graciously took a 75% subsidy to allow additional rural facility participation. By capping urban participants at 35% you not only limit the funding for the urban sites but you also potentially reduce inclusion and reduce the consortium's bargaining power with vendors. In addition, it will add another level of complexity to the program in which consortium members receive no administrative funds.

#### **C. IMPACT ON FUND.**

Urban participants should be required to participate in a consortium application with rural facilities to ensure that the intentions of the urban facility are to help the rural participants.

#### **D. IMPACT ON NETWORK DESIGN.**

Excluding urban sites from eligibility could be detrimental to all projects across the nation. In our project we have often prided ourselves in the "bridging the gap" and providing "those who have with those who need." By eliminating the urban facilities we would essentially be building a bridge to nowhere. Rural partners need to connect to the specialists available at urban facilities.

If you could rewind time to 4 ½ years ago, when we first started several of our current rural partners had existing point to point connections to the urban facilities and were running very low bandwidth at extremely high pricing. An example of this is one of the rural facilities having a T-1 connection (1.54 mbps) and the monthly recurring circuit costing them over \$2,000 per month. Those extreme costs rarely outweigh the benefits because it can still take several hours for the messages to be received on the other end.

Now fast forward to today through the efforts of the RHCPP we connected both rural and urban facilities alike to a high speed dedicated MPLS network with Quality of Service (QoS). This connection allows our rural partners to "talk" to their urban counterparts at a fraction of the cost with more bandwidth. An example is the same facility above having the T-1 connection. This connection has been replaced with a 20 Mbps for around \$450 per month with the option to scale the bandwidth up as the demand becomes more prevalent.

Instead of removing urban facilities involved from the program, the Commission should embrace the fact that urban and rural facilities are sitting at the same table to come up with a more effective healthcare plan with significant cost savings not just here in WNY but across the nation as well.

#### **E. ROLE OF URBAN HEALTH CARE PROVIDERS IF NOT FUNDED.**

R-AHEC is in complete agreement that without the RHCPP some of the urban sites may in fact have been reluctant to participate. By discontinuing these urban sites you would be removing the much needed and added technical and medical expertise that several of the urban counterparts have and are providing to their rural counterparts.

**F. GRANDFATHERING OF URBAN SITES ALREADY PARTICIPATING IN PILOT PROJECTS.**

In the event the commission chooses not to provide funding to urban sites under the Broadband Services Program, they should at a minimum grandfather in all existing pilot and urban sites that have participated in the past. In the case of the Pilot Program participants it could be detrimental to the network designs if these facilities were deemed ineligible and decided to no longer participate. It is believed that the Commission should provide funding and not limit the funding to existing Pilot project urban sites as long as they are a member of a consortium with other rural HCPs.

**SECTION III. ELIGIBLE SERVICES AND EQUIPMENT:**

R-AHEC was fortunate enough to be able to participate as one of those pilot projects that chose to lease our services. Some of the core reasoning and rationale behind this was:

- 1) Several of our HCPs operate with limited staff. It would be overwhelming to ask them to own, maintain, and manage a communications network.
- 2) Leasing the network allows us the flexibility to keep pace with the ever-changing and advancing technologies.

**A. POINT-TO-POINT CONNECTIVITY.**

It is in the opinion of the R-AHEC on behalf of the WNY RBHN consortium of partners that FCC needs to; either clearly define its interpretation of “point to point,” or omit the phrase all together. The RHC should continue to remain technology neutral for the benefit of all facilities participating. We have a dedicated Multi Protocol Label Switching (MPLS) network that was designed to be fast, secure and reliable. Through these connections our facilities are a “point to point”, “point to all” in that they have the availability to talk to everyone on the network, but network traffic is sent “point-to-point” for security purposes.

As the Commission continues to review the Broadband Services Program for healthcare facilities they need to keep in mind that technology advancements are inevitable in the future and by defining the types of services now that are eligible may negatively impact the future of healthcare in years to come.

There should not be any distinction in the types of services that are funding if the applicant is a part of a consortium, as opposed to an individual applicant. The same rules throughout the Broadband Services Program should apply whether filing as a part of a consortium or filing as an individual applicant.

**B. ELIGIBLE NON-RECURRING COSTS (NRCs).**

Eliminating funding for Non Recurring Charges (NRCs) may deter some facilities from participating in the subsidy program. In our RHCPP experience, each facility incurred a one time installation charge and a dedicated router, allowing the network to be managed 24x7. Although both costs are some what minimal (a combined total of around \$5,000), many rural facilities simply cannot afford to pay a \$5,000 additional expenditure. It is our hope that, at a minimum the Broadband Services Program provides a 50% subsidy on these NRCs.

**C. LIMITED FUNDING FOR CONSTRUCTION OF FACILITIES IN BROADBAND SERVICES PROGRAM.**

In the efforts to create a nationwide healthcare network the Broadband Services Program should allow for several different types of connections. As one of the current RHCPP participants, we chose to lease our network to keep up with technology as it continues to evolve. For our project it wasn't feasible, or cost effective, to own the fiber and network ourselves and although it was the best case scenario for us, in WNY, it may not be the best solution across the nation for the other projects.

**D. INELIGIBLE SITES AND TREATMENT OF SHARED SERVICES/COSTS.**

It is the position of R-AHEC that both eligible and ineligible HCPs and organizations should be allowed to participate. As stated on page 12 "Even if not funded, there may be other health and financial reasons why providers that are not funded through the program may wish to enter new cooperative agreements with other providers that are funded, in order to create local and regional health care networks." (Public Notice DA 12-1166, Page 12, July 19, 2012).

In the Pilot Program eligible HCP is defined as:

- (i) "Post-Secondary educational institutions offering health care instruction, teaching hospitals, and medical schools;
- (ii) Community health centers or health centers providing health care to migrants;
- (iii) Local health departments or agencies;
- (iv) Community mental health centers;
- (v) Non-for-profit hospitals;
- (vi) Rural health clinics; and
- (vii) Consortia of health care providers consisting of one or more entities described in clauses (i) through (vi)." (FCC Order; WC Docket 02-60; November 19, 2007).

It is our position that the Commission should not only allow these above listed HCPs the ability to participate in the Broadband Services Program but, should continue to work together with projects/applicants on the definition of eligible HCPs. It takes everyone from all aspects of healthcare to create local and nationwide networks that work. Some of these HCPs that should be considered for inclusion include, but are not limited to, are EMS, dental, inpatient mental health and long term care facilities. Each is critical for a healthy nation and if telemedicine is deployed, medical costs could be reduced in addition to greater efficiencies.

As previously discussed, each project and consortia throughout the nation has their own unique situation. Due to this, the Commission should not adopt a specific approach to shared services and costs for the consortium applicants. They should allow the consortias and consortia members to determine "fair share" and allow them to determine what is the most reasonable solution.

## **SECTION IV. COMPETITIVE BIDDING PROCESS AND RELATED MATTERS:**

### **A. COMPETITIVE BIDDING PROCESS.**

Building upon the experience R-AHEC gained from the Pilot Program, the Commission should provide administrative reimbursement to the consortiums for the time invested in preparation of the RFP, the RFP processing, bid reviews and vendor selection as a percentage of the initial award amount. Processing the complicated paperwork and traversing the RPP process for our consortium of members, has allowed us to offer cost savings for all the partners, however, as the administrator of the project we have incurred significant administrative expenses

### **B. REQUIREMENT TO OBTAIN COMPETITIVE BIDS.**

R-AHEC agrees with the statement from Virginia Telehealth Network “that many rural HCPs are in areas served by a single provider where competitive options do not exist” (Public Notice DA 12-1166, Page 13, July 19, 2012). In our project, we had a vast majority of rural facilities that we initially believed could only be serviced by one last mile provider. As we proceeded through the competitive bidding process, a vendor did submit a bid which offered the last mile provider solution with their managed services at a much lower rate due to the mass purchasing power the consortium has. This allowed us utilization of the last mile provider, a managed services network, and additional cost savings for even the most remote facilities.

### **C. MULTI-YEAR CONTRACTS.**

As referenced, the current definition of “evergreen” changes drastically between the current Primary Program and the Pilot Program. Through our experience in the Pilot Program it was very beneficial and cost effective to bid facilities and enter into multi year contracts. Having to continuously rebid the facilities on a yearly basis is not only overwhelming and time consuming, but an administrative burden to applicants and individuals who are reviewing the documents as well.

Permitting evergreen contracts as multi year contracts as are currently utilized in the Pilot Program allows the program to reap the full benefits with the least amount of administrative burden. A true evergreen contract should be coupled with only having to apply one time for subsidy on a multi year contract as well as filing only one set of paperwork including Form 467. (Example: As in the Pilot Program, a facility has services that go out for bid and signs a five year contract. That facility should not be required to rebid those services until that 5 year contract is exhausted, filing the paperwork at the time the bids are received and reviewed.)

### **D. EXISTING MASTER SERVICES AGREEMENTS (MSAs).**

The Commission should permit applicants for the Broadband Services Program to take services from an existing Master Services Agreement (MSA). As long as the original master contract was awarded through a competitive bidding process. Pilot Projects especially should be able to obtain support from the Broadband Services Program for any services pursuant to MSAs that were negotiated and approved during the Pilot Program.

## **E. ELIGIBLE SERVICE PROVIDERS.**

Expanding upon the definition of eligible service provider would be beneficial to all involved. The current definition as proposed by the NPRM is services must be provided by “a telecommunications carrier or other qualified broadband access service provider.” This eligible services criteria should enable participants to not only receive support for telecommunications services and internet access but also to allow funding to the head consortia designee or other service providers for infrastructure deployment and network design.

## **SECTION V. BROADBAND NEEDS OF RURAL HEALTH CARE PROVIDERS:**

### **A. TELEMEDICINE.**

Bandwidth needs vary widely depending on the type of telemedicine application being utilized. The usage of teleradiology and other telemedicine applications are continuing to gain growth. In WNY throughout the past years facilities were trying to transfer radiology images over a T-1 (1.54 mbps) “point-to-point” costing them well over \$2,000 per month. After several hours the images would then finally arrive but not with the advanced detail needed and required to make appropriate diagnosis.

Broadband needs will only increase and continue to expand as telemedicine continues to grow. For our specific project, the bandwidth was designed to be easily scaleable to promote future growth and needs. A significant factor for future telehealth growth would be the need for reimbursement for telemedicine services, by insurance companies or medicaid/medicare.

The connections between rural HCPs and Urban HCPs are critical. Without these connections there continues to be a divide in the healthcare and services that are available. Our project often refers to connecting the rural and urban facilities as bridging the gap and providing connections from “those who have, to those who need.” In many situations, especially in Western New York specialist providers are in the urban counterparts. In order to see these specialist providers patients have to travel over 100 miles, often in inclement weather, resulting in lost work or school time.

### **B. ELECTRONIC HEALTH RECORDS.**

As the demand and usage of electronic health records increases, the bandwidth that is required by each facility will also increase. There was information that was provided in the national broadband plan Exhibit 10-B: Health Data File Sizes references “text of a single clinical document (HL7 CDA format) = 0.025 Megabytes” being the smallest and the largest file being “cellular pathology study (6 slides) = 25,000 Megabytes” (<http://www.broadband.gov/plan/10-healthcare/>). The broadband plan in Exhibit 10-C: Required Broadband Connectivity and Quality Metrics also references the approximate bandwidth need with “a single physician practice = 4 Megabits per second” ranging to the maximum need with “Academic/Large Medical Center = 1,000 Megabits per second.” (<http://www.broadband.gov/plan/10-healthcare/>). Keeping this in mind and looking towards meaningful use being achieved and becoming mandatory for recipients of Medicare and Medicaid payments it is inevitable the demand for broadband connectivity will only continue to grow.

It is estimated that over 50 percent of practices are still using paper records. As rural and urban practices begin adopting Electronic Health Records for maintaining patient charts, many will look towards the web hosted

option versus inhouse servers. The web based products create less maintenance for the practice which will create near constant web activity to access the patient records stored on the EHR vendor's servers.

#### **C. OTHER TELEHEALTH APPLICATIONS.**

As various telehealth applications continue to evolve there will be continued needs surrounding the telehealth world. It is very likely that additional education, training and technical support will be vastly needed to maximize the telehealth applications to their full capacity.

#### **D. SERVICE QUALITY REQUIREMENTS.**

By participating in the RHCPP we were able to maximize our funding for all HCP facilities involved. Leasing our network allowed our service provider to obtain high level standards on dedicated internet connections in regards to redundancy, latency and jitter. It is recommended in the National Broadband Plan "Reliability (uptime) = 99.9%; Latency = <50 ms primary, <120 ms secondary; Jitter = <20 ms; and Packet loss = 1%" (<http://www.broadband.gov/plan/10-healthcare/>). The WNY RBHN currently has a contract in place for similar reliability, latency, jitter and packet loss that is believed individual HCPs could not have obtained on their own. In addition to a high level contract, WNY RBHN is being monitored 24x7 by the Network Operations Center (NOC).

#### **E. COST SAVINGS FROM BROADBAND CONNECTIVITY.**

Although we currently do not have telehealth application savings or reductions in the number of and length of hospital stay information currently, some of the information we do currently have showing some successes of the project are as follows:

We have an organization that has four facilities that are currently participating in the Pilot Program, of which three of them qualify for the Regular Program. A few years back they looked into applying for subsidy through the Regular Program. They had two people reviewing the paperwork for months and decided that it was a waste of time because they didn't understand or know how to file the papers. This organization also told us that we truly are "angels that were sent to them" because we are able to file the paperwork and work with USAC on their behalf for the subsidy. When it is all said and done the 3 facilities that qualify for the program have gone from 3 mbps connection to a much needed 20 mbps connection with a combined cost savings of \$160,812.60.

Our most rural facility had a 10 Mbps connection previously: (It was copper and, usually on a good day, would only give them 4-5 Mbps) they have been able to increase to the much needed 20 Mbps connection. They are just beginning the implementation phases of "telehealthing" with an affiliated hospital that is 2+ hours away. Instead of driving back and forth, they have already started video conferencing, saving in travel time and money. Through the course of five years, even with an increase of bandwidth, this program is saving them \$18,178 in bandwidth alone. They are now in the process of buying telemedicine equipment to expand telehealth communications.

And the final example is a hospital with locations in two different rural towns. They were spending \$5,500 a month just to have a connection to each other, not including the public internet. By participating in the pilot project they have not only increased their bandwidth by 2-3 times, added on managed services (via the Network Operations Center), and have a substantial savings of \$5,100 per month. Multiply the cost savings over five

years and cost savings are \$306,000. These two facilities are also currently working on expanding affiliations to an urban hospital and new telehealth options as well.

#### **SECTION VI. BROADBAND NEEDS OF RURAL HEALTH CARE PROVIDERS :**

R-AHEC agrees and acknowledges that its comments were filed referencing **WC Docket No. 02-60 and DA 12-1166** and filed using the Commission's Electronic Comment Filing System (ECFS). R-AHEC has also emailed copied of all comments to each of the following:

- 1) Chin Yoo, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, S.W., Room 5-A441, Washington, D.C. 20554; e-mail: [Chin.Yoo@fcc.gov](mailto:Chin.Yoo@fcc.gov);
- 2) Charles Tyler, Telecommunications Access Policy Division, Wireline Competition Bureau, 445 12th Street, S.W., Room 5-A452, Washington, D.C. 20554; e-mail: [Charles.Tyler@fcc.gov](mailto:Charles.Tyler@fcc.gov).